the series fired and a wall of snow was sent into the air.

The principal objection to the use of explosives is found in their effect upon the snow not blown out of the cut. Although the snow as it lays in the drift is compacted to such an extent that its density is two-thirds that of water, it can be dug with shovels fairly easily. The effect of the explosion seems to be to further compact the snow, forming considerable ice. This renders it extremely hard to handle afterward and adds to the cost. This difficulty may be overcome as a steam shovel is usually available.

This method even by its first trial has proven to be workable because explosives today are made to withstand the rigors of extreme temperatures and moisture. The saving in cost and time between the shoveling and blasting of snow drifts is considerable. If details such as the amount of charge required and proper spacing, can be worked out, it is possible that this method of opening high pass roads will be widely used in the future.—Abstracted from *Explosives Engineer.*

DYNAMITE REMOVES SNOW

Dynamite which had been buried seven months and ten days under a winter's accumulation of snow, was successfully exploded at the summit of Fall River Pass in Rocky Mountain National Park, Colorado, in May. The experiment opens new possibilities for the use of explosives in releasing high altitude highways of western United States from the grip of ice and snow each spring. It was the first attempt to detonate a charge placed in this manner. Instead of attacking the drifts in the spring, when it is necessary to penetrate them to set shots it was decided last summer to lay a series of mines when the road was closed in the fall for the purpose of ascertaining whether such a plan could prove successful.

A twenty per cent ammonia dynamite was used in the experiment. Fifty-pound boxes were placed approximately 25 feet apart. The section mined was 300 feet long, in which a total of 650 pounds of dynamite were used to remove a drift of about 20 feet. Every box in